

REMARKS

The Office Action dated March 22, 2004 has been received and carefully noted. No new matter has been added. The following remarks are submitted as a full and complete response thereto.

Claims 1-33 are pending in the present application. Claims 1, 6, 10, and 24 are independent claims. Claims 1-33 are respectfully submitted for consideration.

Rejection of Claims 1-4, 6-7, 9, and 24-27 Under 35 U.S.C. § 102(e):

Claims 1-4, 6-7, 9, and 24-27 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,236,654 B1 to Egbert (Egbert '654). This rejection is respectfully traversed.

Claim 1, upon which claims 2-5 depend, recites a method of constructing an address lookup table in system memory for a network switch. The method includes the step of snooping a communication channel in a network switch for lookup table information. The method also includes, upon detection of lookup table information on the communication channel, the step of transmitting the lookup table information to a remote system memory, thereby constructing a lookup table in the remote system memory.

Claim 6, upon which claims 7-9 depend, recites a method of performing lookups on a network switch. The method recited in claim 6 includes the steps of providing at least one lookup table on a network switch and of providing a communication channel in the network switch, wherein the communication channel communicates lookup information to the lookup table. The method also includes the steps of snooping the communication channel for lookup table information being communicated thereupon and of transmitting the lookup table information to a remote system memory, wherein the lookup table information creates a

duplicate address lookup table in the remote system memory. In addition, the method includes the step of accessing the remote system memory via a CPU to search for selected address information.

Claim 24 recites a network switch that includes at least one lookup table therein, wherein the lookup table is constructed based upon lookup messages transmitted over an internal communication channel. The network switch recited in claim 24 also includes snoop logic that is connected to a remote system memory, wherein the snoop logic is also connected to the internal communication channel to detect lookup table information being transmitted on the channel and to transmit the lookup table information to the remote system memory. In the network switch, the snoop logic creates a duplicate lookup table in the remote system memory, for direct memory access by a remote CPU.

Among the advantages of the methods and network switch recited in claims 1, 6, and 24, respectively, are that they allow for lookups to be performed using a small amount of CPU bandwidth and by creating little additional traffic on CPS channels, thereby increasing switch performance. It is respectfully submitted that Egbert '654 fails to disclose or suggest the elements of any of the presently pending claims. Therefore, it is also respectfully submitted that the cited reference fails to provide at least the advantages of the claimed invention discussed above.

Egbert '654 discloses, at least in the title thereof, a "method and apparatus for managing learning in an address table in memory." Egbert '654 also discloses "an internal rules checker (IRC) 68 and an external rules checker (ERC) 44" (column 6, lines 12-13). Egbert '654 further discloses that, "[i]n order for the ERC 44 to function, the multiport switch 12 sends data to the ERC 44 via the external rules checker interface (ERCI) 42" (column 6, lines 13-15). In addition,

Egbert '654 discloses that that “[w]hen the multiport switch 12 receives a frame, it sends the frame pointer . . . , the receive port number, destination address (DA), source address (SA) and VLAN ID . . . to the IRC 68” (column 6, lines 59-63).

However, Egbert '654 fails to disclose or suggest at least “snooping a communication channel in a network switch for lookup table information”, as recited in claim 1 of the present application. In addition, Egbert '654 fails to disclose or suggest at least “snooping the communication channel for lookup table information being communicated thereupon”, as recited in claim 6 of the present application. Further, Egbert '654 fails to disclose or suggest at least the “snoop logic” recited in claim 24 of the present application.

As shown above, Egbert '654 discloses that the switch disclosed therein sends data directly to the external and internal rules checkers also disclosed therein. At least in view of this direct communication between the switch and the rules checkers, no “snooping” is needed or even contemplated in Egbert '654. Therefore, at least for this reason, Applicant points out that Egbert '654 fails to disclose or suggest at least the “snooping” and “snoop logic” recited in claims 1, 6, and 24, respectively, which, as discussed above, provide at least the advantages of eliminating requirements for a significant amount of CPU bandwidth and of eliminating the creation of additional traffic. Rather, in direct contrast to the claimed invention, Egbert '654 discloses creating and sending additional traffic to the ERC or IRC, which reduces device performance.

At least in view of the above, Applicant respectfully submits that Egbert '654 fails to disclose or suggest the subject matter recited in claims 1, 6, and 24 of the present application. Therefore, Applicant further submits that claims 1, 6, and 24 are patentable over Egbert '654 at least for the reasons discussed above.

As mentioned above, claims 2-4, 7-9, and 25-27 all depend upon either claim 1, 6, or 24, and thereby inherit all of the patentable distinctions thereof. Therefore, Applicant respectfully submits that claim 2-4, 7-9, and 25-27 are patentable over Egbert '654 at least for the reasons discussed above in connection with claims 1, 6, and 24.

At least in view of the above remarks, reconsideration and withdrawal of the rejection of claims 1-4, 6-7, 9, and 24-27 under 35 U.S.C. § 102(e) as being anticipated by Egbert '654 is respectfully requested.

Allowable Subject Matter:


Applicant thanks the Examiner for acknowledging that claims 5, 8, and 28-33 contain allowable subject matter. Applicant also thanks the Examiner for acknowledging that claims 10-23 are allowable. Applicant respectfully submits that, at least in view of the above remarks, claims 5, 8, and 28-33 are dependent upon allowable base claims, and no amendment is therefore needed.

Applicant respectfully submits that all of the issues noted in the Office Action have been addressed and that the rejection included in the Office Action has been overcome. Hence, Applicant respectfully further submits that, at least in view of the above, claims 1-33 of the present application contain allowable subject matter. Therefore, it is respectfully requested that all claims pending in the present application be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


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